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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,381	06/24/2003	Kenichi Hashizume	884A.0006.U1(US)	4723

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EXAMINER

TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,381

Applicant(s)

HASHIZUME ET AL.

Examiner

Brian K. Talbot

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 42 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The amendment filed 7/24/06 has been considered and entered. Claims 20-41 have been canceled. Claims 42-43 have been added. Claims 1-19 and 42-43 remain in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In light of the amendment filed 7/2/406, the 35 USC 102 and 103 rejections have been withdrawn.

Claim Objections

4. Claim 3 is objected to because of the following informalities: the phrase “sealing substance is used, the examiner believes that this is meant to say the “seeding substance”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 1762

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-19 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2003-008180 in combination with Tarponol et al. (3,772,075).

JP 2003-008180 teaches a three-dimensional circuit component for a mobile telephone having a circuit patterned formed on bonding film that is formed on a three-dimensional molding. JP 2003-008180 teaches a bonding film (3) containing a catalyst is formed on a three-dimensional molding (1). A circuit pattern (4) is formed on the bonding film by electroless plating.

JP 2003-008180 fails to teach applying the bonding/catalyst film prior to molding as opposed to after molding.

Tarponol et al. (3,772,075) discloses a method of forming a pattern on an article comprising the steps of applying a carrier material to a substrate to provide the pattern, the carrier material carrying a seeding substance to allow application of a metallic material thereto, molding the substrate to form the article and applying the metallic material to the seeding substance on the carrier material (column 3 lines 9-40, example 2).

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified JP 2003-008180 process by alternating the molding and bonding/catalyst steps with the expectation of achieving similar success for producing a molded article having catalyst thereon for subsequent plating.

Art Unit: 1762

Referring to claim 2, Tarponol et al. (3,772,075) teaches the carrier material comprising an ink and it is applied to the substrate by screen printing (column 10 lines 21-28).

Referring to claim 4, Tarponol et al. (3,772,075) teaches the substrate sags upon heating, this acts to stretch the substrate, the binder material is a resinous oil it would inherently be capable of stretching to the same extent as the substrate as it is a liquid and can form the shape of its container (column 10 lines 5-20).

Referring to claim 6, Tarponol et al. (3,772,075) teaches the seeding substance comprises a plurality of metal particles in the carrier material (column 10 lines 5-20).

Referring to claim 9, Tarponol et al. (3,772,075) teaches the particles are present in a range of 10 % by weight or less (column 10 lines 5-20).

Referring to claim 10 and 11, Tarponol et al. (3,772,075) exemplifies particle weight percents in the range of 0.1 and 0.5 wt % (table 4).

Referring to claims 12-14, Tarponol et al. (3,772,075) discloses all of the features of these claims except it does not disclose the size of the particles it only discloses using a commercially available noble metal luster. However, the size of the particles determines the surface area of the particles per unit volume and smaller particles have more surface area per unit volume accordingly it would be desirable to use particles with high surface area per unit volume as there would be more active sites for seeding than with larger particles. Accordingly, the size of the particles it effects the amount of seeding material necessary. Therefore the size of the particles is a result effective parameter in that it effects the volume of seeding material necessary to form the coating. It would have been obvious to have adjusted the size of the particles to values in the claimed ranges through routine experimentation so as to minimize the volume of

Art Unit: 1762

seeding material necessary, especially in the absence of a showing of a criticality for using values in the claimed ranges.

Response to Amendment

7. Applicant's arguments filed 7/24/06 have been fully considered but they are not persuasive.

Applicant argued that the prior art, Tarponol et al. (3,772,075), failed to teach forming a housing for mobile telephone as opposed to glass windshields.

The Examiner agrees. However, the newly cited reference to JP 2003-008180 teaches this limitation as detailed above in the newly applied rejection necessitated by the amendment.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


Art Unit: 1762

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 10/4/06
Brian K Talbot
Primary Examiner
Art Unit 1762

BKT